

SYNNESTVEIT &amp; LECHNER L.L.P.

In re Application of S. A. Baum  
Application No. 10/671,341Atty. Docket No. P26,015 US1  
Reply to Office Action dated April 21, 2005  
Amendment dated October 21, 2005

**AMENDMENTS TO THE**  
**DESCRIPTIVE PORTION OF THE SPECIFICATION**

On page 1, after the title, please insert the following heading and paragraph, as amended over the preliminary amendment dated November 24, 2003:

**-- CROSS REFERENCE TO RELATED APPLICATIONS**

The present application is a division of U.S. Patent Application No. 09/277,909 09/082,038, filed on May 20, 1998, now U.S. Patent No. 6,872,535, issued March 29, 2005, the disclosure of which is hereby incorporated herein by reference. --

Please replace paragraph [0007] with the following amended paragraph:

[0007] In each of the above patents, the number of molecules that may be synthesized is typically limited by the number of available wells. It is possible to place a mixture of supports having different initial building blocks in one well and thus synthesize multiple molecules in one well. However, it is difficult and costly using current technology to later segregate the molecules when needed. Accordingly, plates have [[beer;]] been fabricated having more rows and columns of wells than the typical 96-well plate. For example, a 384-well plate is also common. Generally, the number of wells is increased by decreasing the size of individual wells such that more wells will fit within the size limitations of a well plate. However, if the wells are smaller, then less support material may be placed in a given well and, in turn, a lesser amount of a molecule may be synthesized in the well.

SYNNESTVEDT &amp; LECHNER LLP

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Please replace paragraph [0072] with the following amended paragraph:

[0072] In general, bead supports 1220 might be fabricated from any type of glass, plastic, or other material that can be functionalized to provide a solid-phase support and that meets the standards and criteria needed for apparatus used in combinatorial chemistry as determined by those skilled in the art. Exemplary materials include pharmaceutical grade glass, silica gel, alumina gel, cellulose, polyolefins, polypropylene, polyethylene, halogenated polyolefins, TEFLO<sup>N</sup> (polytetrafluoroethylene available from E. I. Du Pont de Nemours and Co. in Wilmington, Del.), resin coated on or adhered to the listed materials and other structurally supportive materials, combinations of the listed materials, etc. In addition, bead support 1220 may be other than a spherical support. For example, it may be that bead support 1220 has perforations formed through it such that greater surface area is provided or is shaped to accommodate easy flow of reagents around or through bead support 1220. Some examples of possible shapes include those shown in FIGS. 14-17 and other rods, tubes, rings, spheres, beads, sheets, etc. The diameter of bead supports 1220 or other shaped supports is preferably about 0.5 millimeter (mm) to 20 mm, but could range from 1 micrometer ( $\mu$ m) to 5 centimeters (cm). It is also conceivable that supports could be less than 1 [[km]]  $\mu$ m in diameter if the technology existed to manipulate supports of such a small size. Even within the preferred range of 0.5 mm to 20 mm supports, stacking and manipulation of supports becomes more difficult as size decreases. The top view of wells 1210 shown in FIG. 3 indicates that the openings into wells 1210 are circular, however, wells 1210 may possess any other shape suitable for accepting supports 1220. For example, the openings of wells 1210 may provide one or more channels (not shown) formed in the sides of wells 1210 to accommodate easy flow of reagents around supports contained in wells 1210.